

# **ONE-WAY VALVE ON DIVING MASK**

## **BACKGROUND OF THE INVENTION**

### **(a) FIELD OF THE INVENTION**

The present invention relates to an improved one-way valve  
5 incorporating on a diving mask, which prevents water from coming inside  
and can be blown open to drain water out of the diving mask.

### **(b) DESCRIPTION OF THE PRIOR ART**

Referring to FIG. 1 and 2. To drain water leaking inside a diving  
mask, due to water pressure and an individual's face shape not completely  
10 matching the diving mask, a conventional diving mask 10 may be fitted on  
the nose position with a one-way valve 100 comprising a soft valve plate  
102 on a hard plastic valve seat 101, wherein an astro-fixture 1011 formed  
on top. Fitting the one-way valve 100 on the diving mask 10, water  
drained from the diving mask 10 will be blocked mostly by the  
15 astro-fixture 1011 and the valve seat 101, thereby forming a retro-flow,  
which creates additional efforts in blowing water out of the diving mask  
10.

## **SUMMARY OF THE INVENTION**

The invention relates to a one-way valve incorporated under a nose  
20 cover of a diving mask. The one-way valve thereof can be blown open to  
drain water, without being blocked, out of the diving mask.

To enable a further understanding of the said objectives and the  
technological methods of the invention herein, the brief description of the  
drawings below is followed by the detailed description of the preferred  
25 embodiments.

## **BRIEF DESCRIPTION OF THE DRAWING**

FIG. 1 shows a prospective view of a mask with a conventional one-way valve.

FIG. 2 shows a prospective view of a conventional one-way valve.

5 FIG. 3 shows a prospective view of the present invention.

FIG. 4 shows an exploded elevational view of the present invention.

FIG. 5 shows a cross section view of the present invention.

## **DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS**

10 Referring to FIG. 3 ~ 5. The present invention comprises a one-way valve 2 on a hole 111 formed on a nose cover 11 of a diving mask 1, wherein the one-way valve 2 includes an inner base 21, a valve plate 22, an outer base 23, and a lid 24. A triangular base hole 211, identical to the hole 111 on the nose cover 11, is formed in the center of the inner base 21.

15 A groove 212 is further formed on the outer perimeter of the triangular base hole 211, wherein a fixture hole 213 formed on one side. By inserting the groove 212 from inside through the hole 111 of the nose cover 11, the inner base 21 is firm fixed thereon. By inserting a fixture 221, formed on one side of the valve plate 22, into the fixture hole 213 on

20 the inner base 21, the valve plate 22 thereby lying just on the triangular base hole 211, forming an one-way valve, outward open only. A triangular base hole 231, identical to the hole 111 on the nose cover 11, is formed inside the outer base 23, wherein a fixture strip 232, with a gap 233, formed on the inner perimeter. The valve plate 22 is firm fixed by

25 inserting the fixture strip 232 into the groove 212 on the inner base 21 and

fitting the gap 233 on the outer base 23 to the fixture 221 on the valve plate 22. Two drainage holes 241 are formed on the lid 24, wherein three positioning holes 242 formed inside the groove formed around the outer perimeter. By covering the lid 24 on the outer base 23, with three  
5 positioning projections 234 on the outer perimeter of the outer base 23 inserted into three positioning holes 242 on the lid 24, a one-way valve thereby formed, which prevents water from entering the diving mask 1 and can be blown open to drain water out of the diving mask 1.

In summary, the key to the present invention is only with a slim valve  
10 plate without any obstacle inside. The valve is effective in preventing water from coming inside and can be blown open to drain water out of the diving mask.